



Sequence ID 149456.00100.ST25.txt
SEQUENCE LISTING

<110> Remer, Ricardo A
Margis, Rogerio
Alves Ferreira, Marcio
Coronha Lima, Marcia

<120> Pharmaceutical Product Comprising Tissue of the Male
Vegetal...

<130> 149456.00100

<140> 10/595610

<141> 2006-05-01

<150> PCT/BR04/00100

<151> 2004-11-12

<150> BR PI0305197-8

<151> 2003-11-13

<160> 3

<170> PatentIn version 3.3

<210> 1

<211> 1818

<212> DNA

<213> Artificial

<220>

<223> Complete sequence of the coding region of the AtGRP17
(4940-5358)

+ (5545-6757) - cDNA

<220>

<221> cDNA

<222> (1)..(1818)

<400> 1

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120

tctctttcag agagagatgg aagaaagttt tcttttctca gtatgttctc ttttctcatg

180

ccactgttgg aggttattaa gattattatt gcttctgtgg cctccgtaat cttcgtcggg
240

ttcgccctgtg taaccctcgc tggttctgcc gcagcattag tcgtaagcac cccgggttttc
300

atcatattta gtcctgttct cgtaccagct acgatagcca cggttgtctt ggcgacagga
360

ttcacggccg gtggctcttt tggagcgacg gcacttggtc tcatcatgtg gcttgттааg
420

taagattatt ataacagctt atattgagat cactcgagat ttatgcttaa ttatataata
480

ttcataaacc tatagtttaa aagtatattg aacttcattt gttaacgtac tttataaata
540

ttgaacttcg ttcgttttct taattggctc ctaagtatat atacatactt ttttgtgtga
600

tgcagacgta ggatgggagt aaagccgaag gataatccac ctccggcagg acttccaccg
660

aattcgggag caggagcagg aggagctcaa agtctgatca aaaagtcaaa ggcaaagtct
720

aaaggtgggc ttaaggcttg gtgtaagaag atgttaaaaa gtaaattcgg tggtaaaaaa
780

ggcaagtccg ggggtggaaa aagtaaattt ggaggtaaag gcggtaagtc cgaaggtgaa
840

gaaggtatgt cgtctgggga tgaaggatat tctggaagtg aaggaggtat gtccggagggt
900

gaaggaggta aatccaaaag tggaaaagggt aaactcaaag ctaaactcga aaagaaaaaa
960

ggtatgtccg gaggggtccga gagtgaagaa ggtatgtctg gaagtgaagg aggtatgtct
1020

ggtgggtggag gaagtaaata caaaagtaaa aaaagtaaac tcaaagctaa attgggaaag
1080

aaaaaaggta tgtccggagg catgtcagga agtgaagaag gtatgtctgg aagtgaagga

1140

ggtatgtcca gtggtggagg aagtaaattcc aaaagtaaaa aaagtaaact caaagctaaa
1200

ttgggaaaga aaaaagggtat gtccggaggc atgtcaggaa gtgaagaagg tatgtctgga
1260

agtgaaggag gtatgtccgg aggtggagga ggtaaattcca aaagtagaaa aagtaaactc
1320

aaagctaaat tgggaaagaa aaaatgtatg tccggaggca tgtcaggaaag tgaaggagggt
1380

atgtctggaa gtgaaggagg tatatccgga ggtggtatgt ctgggggagcagg tggaaagtaaa
1440

cacaaaattg gaggaggtaa acacggagggt cttggaggta aattcggaaa gaaaagaggc
1500

atgtccggaa gtggaggagg catgtcaggaa agtgaaggag gtgtgtctgg aagtgaagga
1560

agtatgtctg gaggtggtat gtctgggggt agcggaaagta aacacaaaat tggaggagggt
1620

aaacacggag gtcttagagg taaattcggaa aagaaaagag gtatgtcagg aagtgaagga
1680

ggtatgtctg gaagtgaagg aggtatgtcg gaaagtggta tgtccgggag tggaggggggt
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1800

ggccacatgg cggagtaa
1818

<210> 2
<211> 543
<212> PRT
<213> Artificial

<220>
<223> This protein results from the translation of ATGRP17

<400> 2

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Leu	Arg	Glu	Gly	Arg	Asn	Arg	Phe	Pro	Phe	Leu	Ser	Leu	Ser	Gln	Arg	20	25	30	
Glu	Gly	Arg	Phe	Phe	Pro	Ser	Leu	Ser	Leu	Ser	Glu	Arg	Asp	Gly	Arg	35	40	45	
Lys	Phe	Ser	Phe	Leu	Ser	Met	Phe	Ser	Phe	Leu	Met	Pro	Leu	Leu	Glu	50	55	60	
Val	Ile	Lys	Ile	Ile	Ile	Ala	Ser	Val	Ala	Ser	Val	Ile	Phe	Val	Gly	65	70	75	80
Phe	Ala	Cys	Val	Thr	Leu	Ala	Gly	Ser	Ala	Ala	Ala	Leu	Val	Val	Ser	85	90	95	
Thr	Pro	Val	Phe	Ile	Ile	Phe	Ser	Pro	Val	Leu	Val	Pro	Ala	Thr	Ile	100	105	110	
Ala	Thr	Val	Val	Leu	Ala	Thr	Gly	Phe	Thr	Ala	Gly	Gly	Ser	Phe	Gly	115	120	125	
Ala	Thr	Ala	Leu	Gly	Leu	Ile	Met	Trp	Leu	Val	Lys	Arg	Arg	Met	Gly	130	135	140	
Val	Lys	Pro	Lys	Asp	Asn	Pro	Pro	Pro	Ala	Gly	Leu	Pro	Pro	Asn	Ser	145	150	155	160
Gly	Ala	Gly	Ala	Gly	Gly	Ala	Gln	Ser	Leu	Ile	Lys	Lys	Ser	Lys	Ala	165	170	175	
Lys	Ser	Lys	Gly	Gly	Leu	Lys	Ala	Trp	Cys	Lys	Lys	Met	Leu	Lys	Ser	180	185	190	

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Lys	Phe	Gly	Gly	Lys	Lys	Gly	Lys	Ser	Gly	Gly	Gly	Lys	Ser	Lys	Phe
		195					200					205			
Gly	Gly	Lys	Gly	Gly	Lys	Ser	Glu	Gly	Glu	Glu	Gly	Met	Ser	Ser	Gly
	210					215					220				
Asp	Glu	Gly	Met	Ser	Gly	Ser	Glu	Gly	Gly	Met	Ser	Gly	Gly	Glu	Gly
225					230					235					240
Gly	Lys	Ser	Lys	Ser	Gly	Lys	Gly	Lys	Leu	Lys	Ala	Lys	Leu	Glu	Lys
				245					250					255	
Lys	Lys	Gly	Met	Ser	Gly	Gly	Ser	Glu	Ser	Glu	Glu	Gly	Met	Ser	Gly
			260					265					270		
Ser	Glu	Gly	Gly	Met	Ser	Gly	Gly	Gly	Gly	Ser	Lys	Ser	Lys	Ser	Lys
		275					280					285			
Lys	Ser	Lys	Leu	Lys	Ala	Lys	Leu	Gly	Lys	Lys	Lys	Gly	Met	Ser	Gly
	290					295					300				
Gly	Met	Ser	Gly	Ser	Glu	Glu	Gly	Met	Ser	Gly	Ser	Glu	Gly	Gly	Met
305					310					315					320
Ser	Ser	Gly	Gly	Gly	Ser	Lys	Ser	Lys	Ser	Lys	Lys	Ser	Lys	Leu	Lys
				325					330					335	
Ala	Lys	Leu	Gly	Lys	Lys	Lys	Gly	Met	Ser	Gly	Gly	Met	Ser	Gly	Ser
			340					345					350		
Glu	Glu	Gly	Met	Ser	Gly	Ser	Glu	Gly	Gly	Met	Ser	Gly	Gly	Gly	Gly
		355					360					365			
Gly	Lys	Ser	Lys	Ser	Arg	Lys	Ser	Lys	Leu	Lys	Ala	Lys	Leu	Gly	Lys
	370					375					380				

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Lys Lys Cys Met Ser Gly Gly Met Ser Gly Ser Glu Gly Gly Met Ser
385 390 395 400

Gly Ser Glu Gly Gly Ile Ser Gly Gly Gly Met Ser Gly Gly Ser Gly
405 410 415

Ser Lys His Lys Ile Gly Gly Gly Lys His Gly Gly Leu Gly Gly Lys
420 425 430

Phe Gly Lys Lys Arg Gly Met Ser Gly Ser Gly Gly Gly Met Ser Gly
435 440 445

Ser Glu Gly Gly Val Ser Gly Ser Glu Gly Ser Met Ser Gly Gly Gly
450 455 460

Met Ser Gly Gly Ser Gly Ser Lys His Lys Ile Gly Gly Gly Lys His
465 470 475 480

Gly Gly Leu Arg Gly Lys Phe Gly Lys Lys Arg Gly Met Ser Gly Ser
485 490 495

Glu Gly Gly Met Ser Gly Ser Glu Gly Gly Met Ser Glu Ser Gly Met
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Ser Gly Ser Gly Gly Gly Lys His Lys Ile Gly Gly Gly Lys His Lys
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Phe Gly Gly Gly Lys His Gly Gly Gly Gly Gly His Met Ala Glu
530 535 540

<210> 3
<211> 1569
<212> DNA
<213> Artificial

<220>
<223> Complete sequence of the promoter region of the AtGRP17

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<400> 3

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120

attcaatcgt gagacattga aattgtcgtt tctccattac ctttttggaa gaaaaacat
180

cgaaagctag ctaagacttt ttttattaaa cgaacttgct actatttcta tgttttcttt
240

gaaatgaaaa ttaaatttgt tactgtttca cctaaaactc aaaagtattg ctttttaatt
300

ttattattaa gaaaaactaa tcttatttat gttaagaaac ctgtcaattt ttcattgtta
360

atttcggctc tataattatt aattaacaat caatttctca aaaattgcaa tcatgattat
420

gattagatat atattagttg gattgtgatg cattttttgt aatataaaat ggatgtttgt
480

attagtttct cactcatgta attaaacacc aaatgctaga aactagtact tttgtttctc
540

agctctcgtc tattgttata tctgcaacac gaacaaaaac cttatctagg tgttatatat
600

cacggttatg tttatgagtt agaagggatt cttcaacaaa aatcacggaa ctacttgtat
660

atatgtatgt gtgtatccga tcgaggttga cttccggggg tggacgttga agaagacgaa
720

ttcattgatt gggcttatat atgggcatgt attacttggg tcaagtttgt aacactttta
780

gctttttcaa ttctattcga aaccaaata ttgggctata tatctttata caaccttcaa
840

gataaattgg accaatttta gaagagcaaa ttgaaccg cgttagcgt tagccaaacc
900

ccaactcctt ttcagtacaa ttaaatacaag aatttctaataaat aatcgtgaa tttctagaca

960

tacatatcat aatttcgtca aagcgagcct acacctagtt ttgagctaca taactctttt
1020

cttttttttt ttatgattag gaggtttcaa aacccttgga cccataattt cttataatta
1080

gttttgtaat actaaattta ccattgagag cgacctctcg tcactagtaa ttcgaagatc
1140

tcatatcat gacctatatt aaccatcttc cagtcaagta atttcaatcg aaattcatca
1200

aatcatata tttaacttag taatcacata tgatatggct aatatacgta atataacgat
1260

aaagatttct tcacgctttg atattccata aagcaatgga aatatggaat ggaagaaaac
1320

atttgaattt tacaagaaac aataaataga aggcctacaa aacatgacaa cccacacaca
1380

cacacacgaa aagagaaaat ataaagaagg acatgtaacg tgacgtagcg tagatctcca
1440

ttcactccaa tcgtttttgca tggagcatgc atgtgtgtgt accgtgcacg tagtagagac
1500

cacacaactc cttcataaaa gccctctctc tcttaccatc accaaaacac aacaatccga
1560

tcagaaaat
1569